

Results Frame Work Document for INCOIS

Vision

To be the knowledge and information technology enterprise for oceanic realm.

Mission

To provide the best possible ocean information and advisory services to the society, industry, government and scientific community through sustained ocean observations and constant improvement through systematic and focused research.

Objectives

1. *To provide early warnings on tsunami and storm surge inundations along the Indian coast.*
2. *To provide the advisory services on potential fishing grounds and forecasts on ocean state.*
3. *To establish and maintain the ocean observation systems in the Indian Ocean.*
4. *To establish a ground station to receive the data from Oceansat in real time.*

Section2: Inter se Priorities among key Objectives, Success indicators and Targets

Objective	Weight	Action	Success Indicator	Unit	Weight	Target / criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
To Provide a wide range of ocean information advisories including fishery information	10.00	Strengthening of Ocean Observational network	Number of Deployments	Number	3.00	250	200	175	125	100
		Installation of ground station for the reception of Oceansat-II/OCM data in real-time	Operationalisation of Ground station for Oceansat-II	Date	1.00	30/05/2011	30/06/2011	30/07/2011	30/08/2011	30/09/2011
		Potential Fishing Zone Advisory Services	Potential Fishing Zone Advisories	Number	3.00	140	130	120	100	90
		Ocean State Forecast Services	Ocean State Forecast	Number	3.00	365	328	292	255	219
To provide early warning of natural hazards viz. Cyclone, tsunami, sea level rise	5.0	Tsunami Advisory Services.	Issue of Earthquake bulletin with minimum time lag after the earth quake on sea-bed	Minutes after the quake	2.0	12	15	18	20	25
			Issue of Tsunami Warning with minimum time lag after the earth quake on sea-bed	Minutes after the quake	2.0	30	35	40	45	50
			Issue of Tsunami warning with minimum time lag after the earth quake on sea-bed.	Accuracy of warning (%)	1.0	85	80	77	75	70

Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 08/09	Actual Value for FY 09/10	Target Value for FY 10/11	Projected Value for FY 11/12	Projected Value for FY 12/13
To Provide a wide range of ocean information advisories including fishery information	Strengthening of Ocean Observational network	Number of Deployments	Number	100	150	200	250	--
	Installation of ground station for the reception of Oceansat-II/OCM data in real-time	Establishment of Ground Station	Date	--	31/10/2010	30/05/2011		--
	Potential Fishing Zone Advisory Services	Potential Fishing Zone Advisory	Number	121	113	131	140	--
	Ocean State Forecast Services	Ocean State Forecast	Number	--	--	365	365	--
To provide early warning of natural hazards viz. cyclone, tsunami, sea level rise.	Tsunami Advisory Services	Issue of Earthquake Bulletin with minimum time lag after the earthquake on sea-bed.	Number of EQ bulletins issued within 12 minutes after the earthquake (%)	80	95	98	100	-
		Issue of Tsunami Bulletin with minimum time lag after the earthquake on sea-bed.	Number of Tsunami Bulletins issued within 30 Minutes after the earthquake (%)	80	95	98	100	-
		Issue of Tsunami Warning with minimum time lag after the earthquake on sea-bed	Accuracy of warning (%)	-	60	70	80	-

Section 4:

Description and Definition of Success Indicators and Proposed Measurement Methodology

Objective	Action	Success Indicator	Definitions/Methodology
To provide a wide range of ocean information advisories including fishery information	Strengthening of Ocean Observational network	Number of deployments	Observational platforms viz Argo floats, satellite tracked drifters, current meter moorings, ADCP moorings, XBTs, etc are to be deployed to strengthen and expand the ocean observational network.
	Installation of ground station for the reception of Oceansat-II/OCM data in real-time	Establishment of ground station for Oceansat-II.	ISRO has agreed for the set up ground station at INCOIS for the direct reception of ocean colour data used to issue the potential fishing zone advisories. The ground station includes the installation of 7.5 dia antenna, tracking system and data processing system. The establishment of Ground Station for Oceansat-II will be completed in May 2011.
	Potential Fishing Zone Advisory & Ocean State Forecast Services	Increase in dissemination of Advisories through installation of Electronic Boards	The advisories on Potential Fishing Zone and Ocean State Forecast are provided to fishing community through the Electronic Display Boards installed at fishing and fish landing centers. More number of such boards will be installed at more locations to increase in dissemination.
To provide early warning of natural hazards viz. Tsunami, storm surge inundation	Tsunami advisory services	Issue of Tsunami Warning with minimum time lag after the earth quake on sea-bed	The process of issuing the tsunami early warning involves the detection of the occurrence of earthquake its magnitude and location, assessment of tsunami genesis potential and confirmation of the generation of tsunami through the real time monitoring of sea levels at nearest sea level gauges and bottom pressure recorders. For the warning to be effective and useful, the time lag between the occurrence of earthquake on the sea bed and the tsunami early warning should be minimum.

Section :5
Specific Performance Requirements from other Departments

S. No:	Objectives	Departments	Relavant Success Indicators	What do you need	Why do you need	How much you need	What happens if you do not get it
1	Installation of ground station for the reception of Oceansat-II/OCM data in real-time	NRSC of ISRO	Establishment of ground station for Oceansat-II	Establishment of Antenna and its related equipments	To receive Oceansat-II data	Full establishment	Data reception will not be possible at INCOIS
2	Deployment & Maintenance of Observational Platforms	NIOT, NCAOR	Number of deployments	Ship time and deployment	To deploy observational platforms	80 days of ship time/year	Deployments cannot take place
3	To provide early warnings on tsunami and storm surge inundations along the Indian coast.	IMD, SOI, NIOT	Issue of EQ bulletin within 12 minutes and issue of tsunami bulletin within 30 minutes after the occurrence of earthquake on sea-bed.	Seismic data Sea level data from Tide gauges and data from Tsunami buoys.	To locate earthquakes and issue tsunami warnings	From all instruments deployed for the purpose.	Will not be in a position to provide accurate warnings
4	To provide the advisory services on potential fishing grounds.	ISRO	Potential Fishing Zone Advisories issued in a year	Satellite data on SST and Chlorophyll	To issue PFZ advisories	For all days except for the ban-periods in a year.	Advisories cannot be issued
5	Forecasts on ocean state.	NCMRWF	Ocean State Forecasts issued in a year	Atmospheric forcing fields for running ocean models	To provide forecasts on ocean state.	For 365 days	Forecasts cannot be issued

Section:6

Outcomes/impacts of activities of organization

NO	Outcome/Impact of Organization	Jointly responsible for this outcome/ impact with the following Organizations/ departments	Success Indicator	Trend values of Success indicators				
				2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	To provide early warnings on tsunami and storm surge inundations along the Indian coast.	IMD, SOI, NIOT, ICMAM, ISRO, MHA, NDMA, NEOCs, DEOCs, Coastal State Governments	Issue of EQ bulletin within 12 minutes and issue of tsunami bulletin within 30 minutes after the occurrence of earthquake on sea-bed.	95	98	100	-	--
2	To provide the advisory services on potential fishing grounds	ISRO, State Fisheries Departments, Fishermen Associations, NGOs.	Potential Fishing Zone Advisories issued in a year	113	131	140	--	--
3	Forecasts on ocean state.	NCMRWF, fishermen associations, NGOs, Port authority of Andamans, Gujarat Maritime Board, Navy and Coast Guard	Ocean State Forecasts issued in a year	365	365	365	365	365
4	To establish and maintain the ocean observation systems in the Indian Ocean.	NIOT, NCOAR, NIO, MoES.	Number of Deployments	150	200	250	250	250
5	Installation of ground station for the reception of Oceansat-II/OCM data in real time"	NRSC, Hyderabad	Successful completion of installation as planned (Date)	--		30/05/2011	--	-